

Appl. No. 10/532,354
Preliminary Amdt. Dated June 7, 2005
Reply to Office action of N/A

Amendments to the Drawings:

The attached drawing sheets, sheets 1 through 5, including Figs. 1 through 7, replace the original drawing sheets, sheets 1 through 5, including Figs. 1 through 7.

Attachment: Replacement Sheet

The diagram illustrates a radio receiver system with two parallel processing branches, labeled "FIRST BRANCH" and "SECOND BRANCH".

First Branch (Left Side):

- 1a:** Antenna input.
- 2a:** Amplifier.
- 3a:** Mixer.
- 4:** Local oscillator signal source.
- 5a:** Variable gain amplifier.
- 6a:** Phase shifter block containing two multipliers (**61a**, **62a**) and a 90° phase shifter.
- 7:** Local oscillator signal source.
- 8a:** Multiplier.
- 9a:** Adder.
- 1004a:** Conversion unit.
- 10a:** AGC (Automatic Gain Control) processing unit.
- 11:** Comparison unit.
- 12a:** FFT (Fast Fourier Transform) control unit.
- 13:** Diversity processing unit.
- 14:** Decoder.

Second Branch (Right Side):

- 1b:** Antenna input.
- 2b:** Amplifier.
- 3b:** Mixer.
- 4:** Local oscillator signal source (shared with the first branch).
- 5b:** Variable gain amplifier.
- 6b:** Phase shifter block containing two multipliers (**61b**, **62b**) and a 90° phase shifter.
- 7:** Local oscillator signal source (shared with the first branch).
- 8b:** Multiplier.
- 9b:** Adder.
- 1004b:** Conversion unit.
- 10b:** AGC (Automatic Gain Control) processing unit.
- 11:** Comparison unit.
- 12b:** FFT (Fast Fourier Transform) control unit.

Interconnections:

- The outputs of the comparison units (**11**) from both branches are fed into the diversity processing unit (**13**).
- The diversity processing unit (**13**) is connected to the decoder (**14**).
- The AGC processing units (**10a**, **10b**) are connected to the FFT control units (**12a**, **12b**).
- The FFT control units (**12a**, **12b**) are connected to the diversity processing unit (**13**).

**FIRST
BRANCH**

2/5

FIG. 2

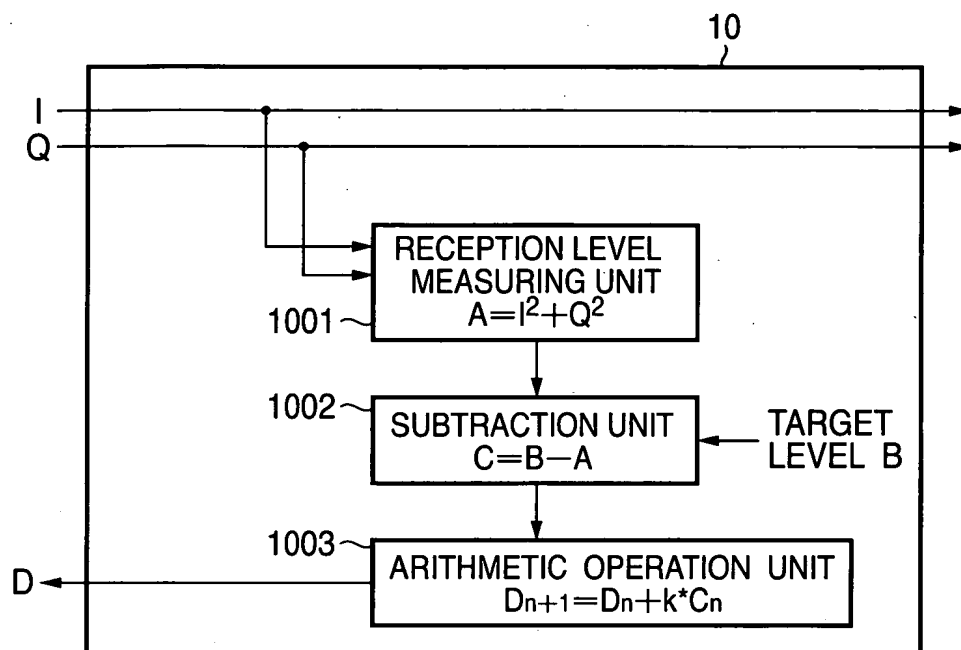


FIG. 3

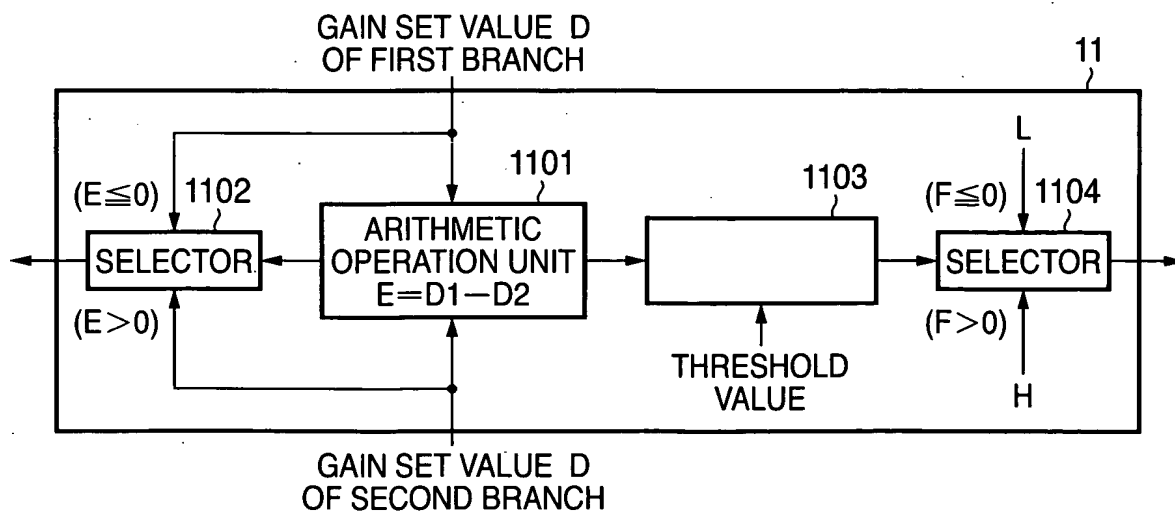


FIG. 5

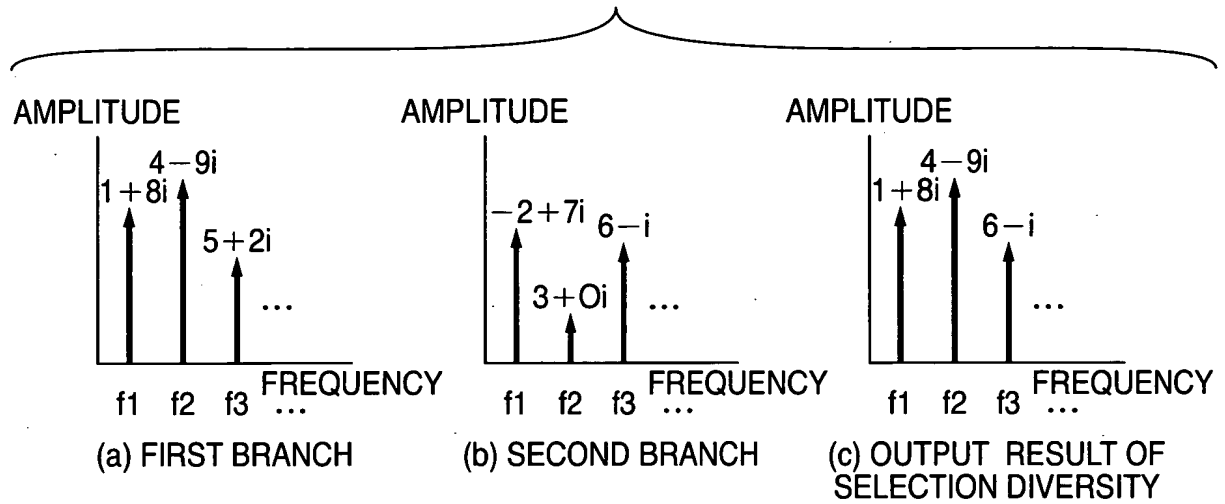


FIG. 6

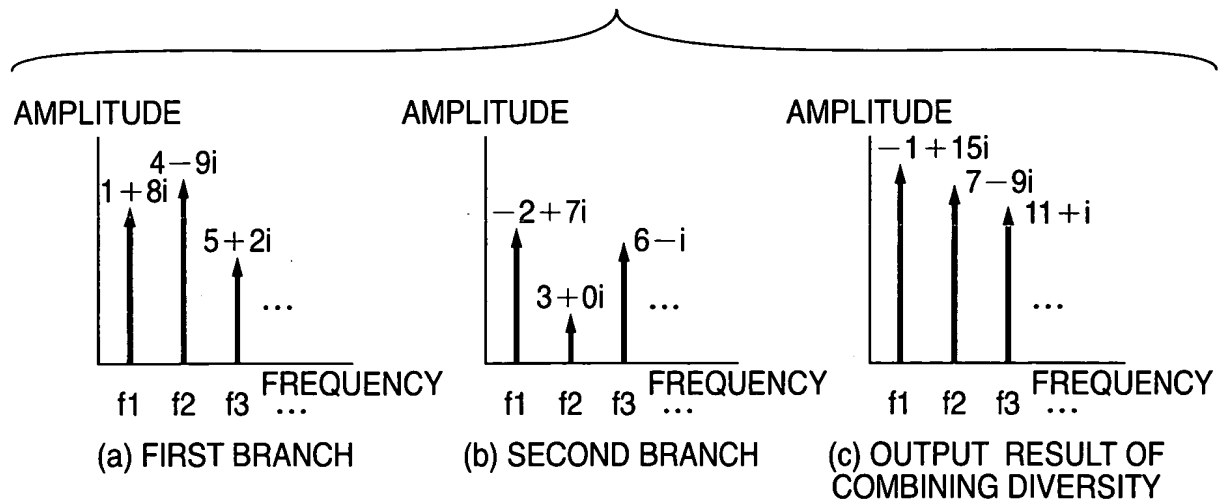


FIG. 7

